

Wisconsin's Phosphorus Rule & Compliance Options

Protecting Wisconsin's Waters

- Phosphorus WQBELs can be included in permits to avoid exceeding the P criteria in the receiving water
 - Prevent adverse effects from excess phosphorus
- Time will be given for facilities to comply with these limits
- Several compliance options exist including trading and adaptive management







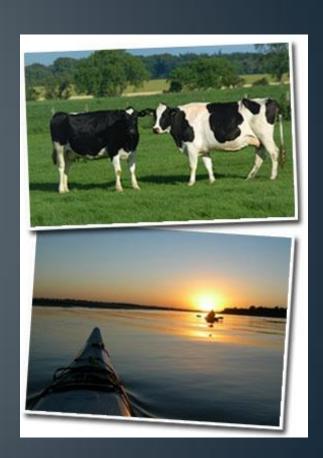




The "New" Compliance Options
Adaptive Management (AM)
& Water Quality Trading (WQT)

What is Water Quality Trading?

- Water quality trading is an exchange of pollutant reduction credits.
- A buyer with a high pollutant control cost can purchase pollutant reduction or treatment from a willing seller.
- Trading can produce substantial cost savings but must result in an improvement in water quality and a net reduction of the pollutant being traded.
- Trading also can provide ancillary environmental benefits such as flood retention, riparian improvement and habitat.



Difficulties with Trading

- Geographic scope restrictions
 - WQT not allowed when localized exceedances of water quality standards will occur
 - Some flexibility available in TMDL watersheds
- Trade ratios apply with nonpoint source trades
 - Based on effectiveness and ease of verification of the management practices employed.
- Credits must be generated before they are used
 - BMP in-place and effective

Adaptive Management Basics















What is Adaptive Management?

- Compliance option focusing on water quality improvements,
 rather than a phosphorus offset
- Allows point sources to work with nonpoint sources to reduce overall phosphorus loads so that water quality criteria can be attained
- NR 217.18, Wis. Adm. Code



What Adaptive Management is NOT

- NOT an option for all point sources
 - Specific eligibility requirements must be met

- NOT water quality trading
 - End of pipe compliance option

Eligibility Requirements

- Receiving water exceeding the WQC
- 2. NPS contribute >50% of P load or NPS must be controlled
- Filtration or equivalent technology required to meet
 WQBEL

NOTE: MS4s considered nonpoint under adaptive management

Determining NPS contributions

- Must use sound scientific data and rationale
- PRESTO also available
 - Calculates basin specific average annual phosphorus loads from point and nonpoint sources
- PRESTO combines three concepts: Watershed Delineation, Effluent Aggregation, and Pollutant Runoff

Watershed Delineation



+

Effluent Aggregation



Runoff



Pollutant



PRESTO Online

- What's available?
 - Look up tool
 - GIS Model
 - User Manuel

http://dnr.wi.gov/,
 search "PRESTO"

Phosphorus tools

Pollutant Load Ratio Estimation Tool (PRESTO)

The Pollutant Load Ratio Estimation Tool (PRESTO) is a statewide GIS-based tool that compares the average annual phosphorus loads originating from point and nonpoint sources within a watershed. The comparison provides a screening tool for industrial and municipal dischargers to determine one of the conditions of eligibility for adaptive management as part of s. NR 217.18, Wisconsin Administrative Code.

PRESTO was designed to be easily modified, transparent to the end user, and provide a consistent result based on readily available datasets. PRESTO performs three basic functions: watershed delineation, nonpoint source loading estimation, and point source loading aggregation. The PRESTO outputs include a delineated watershed, watershed land cover composition, the estimated average annual nonpoint source and measured point source phosphorus loads (pounds per year), and the ratio of point to nonpoint phosphorus at a watershed outlet.



Point: Nonpoint Source Ratio

A Point Source Load

+ Sum of All Upstream C

Nonpoint Estimation Load Model

Is my facility in a nonpoint source phosphorus dominated watershed?

To be eligible for adaptive management, a facility must be located within a nonpoint source dominated watershed (greater than 50% of the total phosphorus load must come from upstream nonpoint sources such as agricultural or urban runoff). To assist with the phosphorus source question PRESTO has been run for 606 municipal and industrial outfalls statewide. To determine if your facility is located in a nonpoint source dominated watershed, thus meeting one of the adaptive management eligibility requirements, download the "Facility Eligibility Lookup" document below, find your facility in the table, and look for the column called "Nonpoint Source Dominated?"

Nonpoint Source Dominated Facility Lookup [PDF, 67KB]

Learn more about the other adaptive management eligibility requirements.

Surface water

Atlas Data & Webinar

About Wisconsin's waters.

Standards

Goals for water resources.

Monitorina

Monitoring water quality.

Assessments & Reporting Evaluating condition.

Planning

Planning for water quality.

Management

Managing water resources.

Water Evaluation

- Use Designations
- ORW/ERW Waters
- Antidegradation
- Triennial Standards Review
- Phosphorus Rules
- Thermal Rules
- Water Quality Based Effluent Limitations

Water Resources

- Explore WI Waters
- Surface Water Viewer
- Water Search
- Watershed Search
- Project Search
- Impaired Search

Wisconsin State Codes

- ch NR 102
- ch NR 103

Similarities between AM and WQT

- Voluntary compliance options for WPDES permit holders to comply with phosphorus requirements
- Options will be used when it is economically preferable to control nonpoint sources or other point sources of P
- Both require nonpoint and/or other point source reductions
 - Contractual agreements should be made
 - Need to look in same watershed (HUC 12)





Differences

	Adaptive Management	Trading
Pollutants Covered	TP (and possibly TSS)	All pollutants except BCCs
End Goals	Attaining the water quality criteria	Offsetting the limit
Implementation Area	Watershed-focused	Upstream-focused
Offsets	No trade ratios	Trade ratios apply
Timing	Implemented throughout the permit term	Generating credits before they can be used
In-Stream Monitoring	Required	Not required
Level of Documentation Needed	General watershed information	Field-by-field documentation

Upcoming Training Opportunity

- Water Quality Trading & Adaptive Management Overview Recording now available
- Water Quality Trading & Adaptive Management--Finding and Quantifying Credits
 Recording now available
- Water Quality Trading & Adaptive Management--Developing a Plan

Date: Wednesday, March 19, 2014 Time: 9:00 AM - 10:30 AM CDT

Water Quality Trading & Adaptive Management--Implementing & Verifying Offsets

Date: Wednesday, April 9, 2014 Time: 9:00 AM - 10:30 AM CDT

WDNR Resources Available

 Statewide and regional adaptive management & trading coordinators

Adaptive Management Handbook

Trading How To Manual
 & Permit
 Implementation
 Guidance



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DNR WEB PAGE

- dnr.wi.gov
 - search/keyword
 - PRESTO
 - **ADAPTIVE MANAGEMENT**
 - WATER QUALITY TRADING